

## MoDOT Technican Certification Program - Certification Levels

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Note: Attendance of these courses require completion of an Application sent to the MoDOT Materials Qualification Engineer.

### Level 1 Technician

2 Days, First Time

1 Day, Re-Certification

AASHTO	T 2	Sampling of Aggregates
AASHTO	T 11	Materials Finer than No. 200 by Washing
AASHTO	T 27	Sieve Analysis of Fine and Coarse Aggregates
AASHTO	T 248	Reducing Samples of Aggregate to Testing Size
AASHTO	T 255	Total Moisture Content of Aggregates by Drying
MoDOT	TM 71	Deleterious Content of Aggregate
MoDOT	TM 20	Measurement of Air, Surface or Bituminous Mixture Temperature

### Level 1 Bituminous

Requires Level 1 Technician

2 Days, First Time

1 Day, Recert

AASHTO	T 40	Sampling Bituminous Materials
MoDOT	TM 53	Determining the Moisture Content of a B
MoDOT	TM 54	Determining the Asphalt Content of a Bit
AASHTO	T 166	Bulk Specific Gravity of Compacted Bitui
AASHTO	T 168	Sampling Bituminous Paving Mixtures
AASHTO	T 269	Percent Air Voids in Compacted Dense i

### Level 2 Soils

Requires Level 1 Technician be Passed First

2 Days, First Time

1 Day, Re-Certification

AASHTO	T 87	Dry Preparation of Disturbed Soil and Soil Aggregate Samples for Test Particle Size Analysis of Soils(Soils specific)
AASHTO	T 99	Moisture-Density Relations of Soils
AASHTO	T 265	Laboratory Determination of Moisture Content of soils
AASHTO	TM 40	A One-Point Moisture-Density Relations Test for Soils
AASHTO	T 310	Density and Moisture Content of Soil and Soil-Aggregate by Nuclear Methods(Shallow Depth)
MoDOT	TM 35	Moisture Offset Factor for a Nuclear Gauge

### Level 2 Aggregate

Requires Level 1 Technician be Passed First

2 Days, First Time

1 Day, Re-Certification

		Aggregate QC/QA Plans with discussion of quarry operation affect on bituminous mixture.
AASHTO	T 87	Dry Preparation of Disturbed Soil and Soil Aggregate Samples for Test Particle Size Analysis of Soils(Aggregate specific)
AASHTO	T 89	Determining the Liquid Limit of Soils(Aggregate specific)
AASHTO	T 90	Determining the Plastic Limit And Plastic Index of Soils(Aggregate specific)
AASHTO	T 176	Plastic Fines in Graded Aggregates and Soils by Use of the Sand Equivalent Test
AASHTO	T 304	Un-compacted Void Content of Fine Aggregate
ASTM	D 4791	Flat Particles, Elongated Particles, or Flat and Elongated Particles in Coarse Aggregates
ASTM	D 5821	Standard Test Method for Determining the Percentage of Fractured Particles in Coarse Aggregates

### Level 2 Concrete

Requires Level 1 Technician be Passed First

2 Days, First Time

1 Day, Re-Certification

AASHTO	T 22	Compressive Strength of Cylindrical Concrete Test Specimens
AASHTO	T 23	Making and Curing of Concrete Test Specimens In the Field
AASHTO	T 119	Slump of Hydraulic Cement Concrete
AASHTO	T 141	Sampling of Freshly-Mixed Concrete
AASHTO	T 152	Air Content of Freshly-Mixed Concrete by the Pressure Method
ASTM	C 1064	Temperature of Freshly-Mixed Portland Cement Concrete

MoDOT - TCP

9/10/03

## MoDOT Technican Certification Program - Certification Levels

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MoDOT - TCP

### Level 2 Bituminous

Requires Level 1 Technician and Level 1 Bituminous

5 Days, First Time

2 Days, Re-Certification

AASHTO	T 209	HMA Maximum Specific Gravity
AASHTO	T 312	Preparing and Determining the Density of Hot-Mix Asphalt (HMA) Specimens by Means of the Superpave Gyratory Compactor
AASHTO	T 308	Binder Ignition Oven
AASHTO	T 305	Determination of Draindown Characteristics in Uncompacted Asphalt Mixtures
AASHTO	PP 2	Standard Practice for Mixture Conditioning of Hot Mix Asphalt(HMA)
AASHTO	PP 19	Volumetrics
		HMA QC Plan
		Pay Factor Theory, QC/QA
		Record Keeping, QC/QA
		Contract Administration, QC/QA
		Random Sampling
AASHTO	T 283	Resistance of Compacted Bituminous Mixtures to Moisture Induced Damage
AASHTO	PP 28	Practice for SuperPave Volumetric Design for Hot Mix Asphalt(HMA)
AASHTO	MP 2	Specification for SuperPave Volumetric Mix Design
		Plant Operation
		Intro to SuperPave
		Temperature-Viscosity Relations
		Field Verification
		Job Mix Formula Interpretation

### Additional Certification classes

#### Aggregate Specific Gravity

Requires Level 1 Technician be Passed First

1 Day

AASHTO	T 84	Specific Gravity and Absorption of Fine Aggregate
AASHTO	T 85	Specific Gravity and Absorption of Coarse Aggregate
AASHTO	T 100	Specific Gravity of Hydrated Lime and Mineral Filler

#### Profilograph

No Prerequisite

1 Day

MoDOT	TM 59	Determination of the Profilograph Index
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#### Low Slump

Requires Level 2 Concrete be Passed First

1 Day

MoDOT	TM 36	Nuclear Density for Concrete Overlays
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9/4/01